



## **Hazardous Air Pollutant Emissions from Boat Manufacturing**

#02-55(APCB) / LSA Document #02-55

### **Overview**

This rule adds to state rules the requirements of a federal rule for boat manufacturing and amends the state styrene rule to adjust the requirements to resolve conflicts between the two rules.

### **Citations Affected**

Adds 326 IAC 20-48.

Amends 326 IAC 20-25.

### **Affected Persons**

Major sources of hazardous air pollutants (HAPs) that manufacture aluminum recreational boats and all types of fiberglass boats will be affected by these rules. Major sources and persons in the vicinity of these businesses will benefit from the reduced emissions.

### **Reasons for the Rule**

This rulemaking will incorporate the federal requirements for boat manufacturing in a new rule, add state requirements in the existing state rule that are more stringent and amend the state styrene rule so that boat manufacturers do not have to comply with conflicting requirements.

### **Economic Impact of the Rule**

Because this emission standard is a federal requirement and businesses are required to comply, the state rulemaking will not result in additional costs to the regulated entities or to the state.

### **Benefits of the Rule**

Citizens living and working in the vicinity of these businesses will benefit from the reduced emissions of hazardous air pollutants. Businesses subject to both the federal and state rules will benefit from having all the requirements combined in a single rule.

### **Description of the Rulemaking Project**

In October 2000, the Air Pollution Control Board final adopted 326 IAC 20-25, Emissions from Reinforced Plastics Composites Fabricating Emission Units, that is applicable to open molding operations at various sources including boat manufacturing companies. The rule requires:

- using low styrene resins and gel coats;
- decreasing atomization by modifying how resins and gel coats are applied;
- limiting HAP containing cleaning solvents;
- decreasing evaporation of resins and gel coats by requiring work practice standards;
- assuring compliance with the rule by record keeping and reporting; and
- operator training for personnel involved in resin and gel coat spraying and spray-like applications.

On August 22, 2001, U.S. EPA issued a final national emission standard for hazardous air pollutants (NESHAP) (66 FR 44217) to reduce hazardous air pollutants from boat manufacturing. A correction to a spelling error and a formula in the final rule were published on October 3, 2001 (66 FR 50504). The processes regulated include fiberglass resin and gel coat operations, carpet and fabric adhesive operations, and aluminum recreational boat painting operations. The NESHAP regulates organic HAPs from major sources that manufacture aluminum recreational boats, such as noncommercial and nonmilitary aluminum boats, and all types of fiberglass boats. Operations subject to the NESHAP include: open molding, closed molding, equipment cleaning, resin and gel coat mixing operations, carpet and fabric adhesive operations, surface coating, and spray gun cleaning and wipedown solvent operations. Typically these facilities are designated as Standard

Industrial Classification (SIC) codes 3731 and 3732 or the North American Industry Classification System (NAICS) code 336612. In Indiana, less than ten (10) businesses are subject to the federal rule. These existing sources subject to the federal regulation are required to comply by August 23, 2004, and new and reconstructed sources must comply at initial startup. IDEM must incorporate the federal requirements into state rules or establish state requirements that are no less stringent than the federal requirements.

Most of the requirements of the federal MACT rule duplicate requirements of the state rule for reinforced plastics composites. Some differences between the two rules are the emissions averaging time, HAP content for nonatomized application of military and skin coat resins, work practice standards, and operator training. In some cases, the federal rule is more stringent than the state styrene rule, such as HAP content for atomized application of tooling resin and gel coat. The Indiana styrene rule is more stringent for other requirements, such as HAP content for routine cleaning solvents. IDEM has considered how to address the overlapping requirements of these two rules in a way that simplifies compliance but assures an overall level of environmental protection consistent with the elements of both rules. IDEM proposes the following approach:

- all requirements applicable to boat manufacturers will be contained in a single rule: 326 IAC 20-48;
- conditions of the state rule that are more stringent than the federal MACT standard will continue to apply to boat manufacturers;
- sources subject to the federal rule will be exempt from the requirements of 326 IAC 20-25 after the applicable compliance date.

In addition, IDEM proposes to update the reference date of the “Unified Emission Factors for Open Molding of Composites” from April 1999 to July 2001. The updated emission factors include emissions from nonatomized gel coat applicators because they significantly reduce emissions during the application of gel coats. For example, at thirty seven percent (37%) styrene content in the gel coat, compliant with 326 IAC 20-25 and by using a nonatomized gel coat applicator, the emissions drop

from three hundred seventy seven (377) pounds of styrene per ton of gel coat used to two hundred thirty two (232) pounds per ton of gel coat used. The use of nonatomized gel coat applicators will require a commitment from the companies that choose to implement them because nonatomized gel coat applicators are expensive, and require additional maintenance and employee training. The nonatomized application of gel coat technology was not available when the state styrene rule was final adopted by the Air Pollution Control Board. Due to the significant emissions reduction, IDEM proposes to include this technology in the rule for boat manufacturing.

### **Scheduled Hearings**

First Public Hearing: September 4, 2002, Conference Center Room C, Indiana Government Center-South, 402 West Washington Street, Indianapolis, Indiana.

Second Public Hearing: Tentatively scheduled for early 2003.

### **Consideration of Factors Outlined in Indiana Code 13-14-8-4**

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account the following:

- 1) All existing physical conditions and the character of the area affected.
- 2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.
- 3) Zoning classifications.
- 4) The nature of the existing air quality or existing water quality, as appropriate.
- 5) Technical feasibility, including the quality conditions that could reasonably be achieved through coordinated control of all factors affecting the quality.
- 6) Economic reasonableness of measuring or reducing any particular type of pollution.
- 7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to:
  - (A) human, plant, animal, or aquatic life; or
  - (B) the reasonable enjoyment of life and property.

**Consistency with Federal Requirements**

The new and amended rules are consistent with federal rules.

**Rulemaking Process**

The first step in the rulemaking process is a first notice published in the *Indiana Register*. This includes a discussion of issues and opens a first comment period. The second notice is then published which contains the comments and the department's responses from the first comment period, a notice of first meeting/hearing, and the draft rule. The Air Pollution Control Board holds the first meeting/hearing and public comments are heard. The proposed rule is published in the *Indiana Register* after preliminary adoption along with a notice of second meeting/hearing. If the

proposed rule is substantively different from the draft rule, a third comment period is required. The second public meeting/hearing is held and public comments are heard. Once final adoption occurs, the rule is reviewed for form and legality by the Attorney General, signed by the Governor, and becomes effective 30 days after filing with the Secretary of State.

**IDEM Contact**

Additional information regarding this rulemaking action can be obtained from Jean Beauchamp, Rules/Regulatory Development Section, Office of Air Quality, (317) 232-8424 or (800) 451-6027 (in Indiana).